Claims

1.   A system for transmitting signals (S) to a plurality of sub-
scriber receivers (110), wherein each signal (S) represents a type
of information belonging to a particular contents category,
5   comprising:
        a central management server (100) adapted to receive ad-
ministrative instructions (I_{adm1}, I_{adm2}, I_{adm3}) pertaining to the trans-
mission of the signals (S) to the subscriber receivers (110), and in
response to the administrative instructions (I_{adm1}, I_{adm2}, I_{adm3})
10   organize signals (S_{1a}, S_{1b}, S_{2a}, S_{2b}, S_1, S_2, S_3, S_4, C) from at least
one signal source (120, 141, 142, 143, 144, 151a-b, 152a-b)
before transmission thereof to the subscriber receivers (110), and
        at least one client computer (151, 152, 153) each having an
interface towards the central management server (100) and being
15   adapted to produce administrative instructions (I_{adm1}, I_{adm2}, I_{adm3})
for organizing a sub-set of the signals (S) to be transmitted via
the central management server (100).

2.   A system according to claim 1, **characterized in that** it
comprises a central transmission unit (160) adapted to receive
20   the signals (S) from the central management server (100) and,
in accordance with an organization scheme (200) produced by
the central management server (100), transmit these signals (S)
to the subscriber receivers (110) via a central signal distribution
system (165, 170).

25 3.   A system according to claim 2, **characterized in that** the
organization scheme (200) specifies, for each signal (S) to be
transmitted, a transmission resource (TV3, TV4, TV5, CNN,
Fill1, Fill2, Fill3, Fill4), a time instance and a contents category,
wherein the contents category for at least one segment (s') of
30   the signal (S) determines which sub-segment that will be pre-
sented in which subscriber receiver (110).

4.   A system according to claim 3, **characterized in that** each

of the subscriber receivers (110) comprises an interpreting unit having a user specific key representing a profile category of at least one user associated with the subscriber receiver, the interpreting unit being adapted to control the reception of a

5   signal (S) such that the key in combination with a piece of contents category information received with respect to a segment (s') of the signal (S) control the subscriber receiver to present a predetermined sub-segment (s'$_{1d}$) transmitted via a particular transmission resource (TV3, TV4, TV5, CNN, Fill1, Fill2, Fill3,

10   Fill4).

5.   A system according to any one of the claims 3 or 4, characterized in that it comprises a return channel (N) from at least one particular subscriber receiver (111) of the subscriber receivers (110) adapted to forward activity-monitoring infor-

15   mation (R) pertaining to signals (S) having been presented in the particular subscriber receiver (111) to the central management server (100), and the central management server (100) is adapted to generate a compiled data set representing the activity-monitoring information (R).

20   6.   A system according to any one of the claims 3 - 5, characterized in that at least one of at least one client computer (151, 152, 153) comprises a means for manually entering activity-monitoring information (R) pertaining to signals (S) having been presented in one or more subscriber receivers

25   (110), and based thereon produce a compiled data set representing the activity-monitoring information (R).

7.   A system according to any one of the claims 5 or 6, characterized in that at least one of the at least one client computer (151, 152, 153) is adapted to receive the compiled data

30   set from the central management server (100), and produce the administrative instructions (I$_{adm1}$, I$_{adm2}$, I$_{adm3}$) on basis thereof.

8.   A system according to any one of the claims 3 - 7, cha-

racterized in that it comprises at least one billing unit (190, 191) adapted to produce billing information pertaining to a respective utilization of the transmission resources (TV3, TV4, TV5, CNN, Fill1, Fill2, Fill3, Fill4) administrated by the central
5   management server (100).

9.   A system according to any one of the claims 2 - 8, cha-racterized in that it comprises at least one auxiliary distribution channel (165, 185) adapted to transmit signals (S, σ1, σ2) to the subscriber receivers (110) outside the organization scheme (200)
10   produced by the central management server (100)

10.   A system according to claim 9, characterized in that the at least one auxiliary distribution channel includes at least one distribution resource (185) in addition to the central signal distribution system (165, 170).

15   11.   A system according to any one of the preceding claims, characterized in that the signals (S, σ1, σ2) represent at least one of text information, acoustic information, image information and video information.

12.   A system according to any one of the preceding claims,
20   characterized in that at least one of the subscriber receivers (110) is represented by at least one of a TV-tuner, a satellite signal decoder, a computer and a broadband mobile communi-cation terminal.

13.   A client computer (151, 152, 153) adapted to be included in
25   a system according to any one of the claims 1 - 12, cha-racterized in that it comprises a graphical user interface (300) adapted to present a time relationship between different signals (S) to be transmitted on at least one channel (TV1, TV2) over which the client computer has a management control.

30   14.   A client computer (151, 152, 153) according to claim 13,

characterized in that the graphical user interface (300) comprises a first graphical means (310) adapted to, for each of the signals (S) to be transmitted on the at least one channel (TV1, TV2), present the signal's contents category, and a second
5   graphical means (320) adapted to, for at least a sub-set of the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable a user to manipulate segments (s') of each signal (S) such that a particular sub-segment (s'_{1d}) will be presented in each subscriber receiver of the subscriber receivers (110) which
10   has a profile category matching a contents category associated with the particular sub-segment (s'_{1d}).

15.   A client computer (151, 152, 153) according to claim 14, characterized in that the graphical user interface comprises a third graphical means (330) adapted to, for at least a sub-set of
15   the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable the user to select a suitable sub-segment (s'_{1d}) for each of a number of profile categories for a segment (s') of a signal (S).

16.   A client computer (151, 152, 153) according to claim 15,
20   characterized in that the third graphical means (330) comprises a selection means adapted to enable the user to, for each sub-segment (s'_{1d}) select a profile category, wherein a default profile category is based on a compiled data set formed on basis of activity-monitoring information (R) pertaining to sig-
25   nals (S) having been presented in the subscriber receivers (110).

17.   A client computer (151, 152, 153) according to any one of the claims 15 or 16, characterized in that the third graphical means (330) comprises a selection means adapted to allow the
30   user to, for each sub-segment (s'_{1d}) select a geographical area within which subscriber receivers will present the sub-segment (s'_{1d}), wherein a default geographical area is based on positional information pertaining to signals (S) having been pre-

sented in the subscriber receivers (110).

18. A client computer (151, 152, 153) according to any one of the claims 15 - 17, **characterized in that** the third graphical means (330) comprises a selection means adapted to enable the
5   user to, for each sub-segment (s'_{1d}) select a priority level denoting a relative position of the sub-segment (s'_{1d}) within a particular segment (s').

19. A client computer (151, 152, 153) according to any one of the claims 13 - 18, **characterized in that** it comprises a compiler
10   adapted to produce a preliminary organization of the signals (S) on the at least one channel (TV1, TV2) before transmitting corresponding administrative instructions to the central management server (100).

20. A client computer (151, 152, 153) according to claim 19,
15   **characterized in that** the graphical user interface comprises a fourth graphical means adapted to enable a user to manipulate the preliminary organization of the signals (S), and client computer comprises processing means adapted to, based on the user manipulations, produce administrative instructions to the
20   central management server (100).

21. A client computer (151, 152, 153) according to any one of the claims 13 - 20, **characterized in that** the signals (S, σ1, σ2) represent at least one of text information, acoustic information, image information and video information.

25   22. A computer program directly loadable into the internal memory of a computer, comprising software for controlling the functions of a client computer according to any of the claims 13 - 21 when said program is run on the computer.

23. A computer readable medium, having a program recorded
30   thereon, where the program is to make a computer control the functions of a client computer according to any of the claims 13 - 21.

Claims

1.   A system for transmitting signals (S) to a plurality of sub-
scriber receivers (110), wherein each signal (S) represents a type
of information belonging to a particular contents category,
5   comprising:

a central management server (100) adapted to receive ad-
ministrative instructions (I_{adm1}, I_{adm2}, I_{adm3}) pertaining to the trans-
mission of the signals (S) to the subscriber receivers (110), and in
response to the administrative instructions (I_{adm1}, I_{adm2}, I_{adm3})
10   organize signals (s_{1a}, s_{1b}, s_{2a}, s_{2b}, s_1, s_2, s_3, s_4, C) from a number
of signal sources (120, 141, 142, 143, 144, 151a-b, 152a-b)
before transmission thereof to the subscriber receivers (110),

at least one client computer (151, 152, 153) each having an
interface towards the central management server (100) and being
15   adapted to produce administrative instructions (I_{adm1}, I_{adm2}, I_{adm3})
for organizing a sub-set of the signals (S) to be transmitted via
the central management server (100), and

a transmission unit (160) adapted to receive the signals (S,
$\sigma1$, $\sigma2$) and, in accordance with an organization scheme (200)
20   produced by the central management server (100) transmit
these signals (S) to the subscriber receivers (110), the organi-
zation scheme (200) specifies, for each signal (S) to be trans-
mitted, a transmission resource (TV3, TV4, TV5, CNN, Fill1,
Fill2, Fill3, Fill4), a time instance and a contents category,
25   wherein the contents category for at least one segment (s') of
the signal (S) determines which sub-segment that will be pre-
sented in which subscriber receiver (110).

2.   A system according to claim 1, **characterized in that** the
transmission unit (160) is adapted to transmit the signals (S) via
30   a central signal distribution system (165, 170).

3.   A system according to any one of the claims or 2, **cha-
racterized in that** each of the subscriber receivers (110) com-
prises an interpreting unit having a user specific key repre-
senting a profile category of at least one user associated with

the subscriber receiver, the interpreting unit being adapted to control the reception of a signal (S) such that the key in combination with a piece of contents category information received with respect to a segment (s') of the signal (S) control the
5   subscriber receiver to present a predetermined sub-segment (s'_{1d}) transmitted via a particular transmission resource (TV3, TV4, TV5, CNN, Fill1, Fill2, Fill3, Fill4).

4.   A system according to any one of the preceding claims, **characterized in that** it comprises a return channel (N) from at
10   least one particular subscriber receiver (111) of the subscriber receivers (110) adapted to forward activity-monitoring information (R) pertaining to signals (S) having been presented in the particular subscriber receiver (111) to the central management server (100), and the central management server (100) is
15   adapted to generate a compiled data set representing the activity-monitoring information (R).

5.   A system according to any one of the preceding claims, **characterized in that** at least one of at least one client computer (151, 152, 153) comprises a means for manually
20   entering activity-monitoring information (R) pertaining to signals (S) having been presented in one or more subscriber receivers (110), and based thereon produce a compiled data set representing the activity-monitoring information (R).

6.   A system according to any one of the claims 4 or 5, **cha-**
25   **racterized in that** at least one of the at least one client computer (151, 152, 153) is adapted to receive the compiled data set from the central management server (100), and produce the administrative instructions (I_{adm1}, I_{adm2}, I_{adm3}) on basis thereof.

7.   A system according to any one of the preceding claims,
30   **characterized in that** it comprises at least one billing unit (190, 191) adapted to produce billing information pertaining to a respective utilization of the transmission resources (TV3, TV4,

TV5, CNN, Fill1, Fill2, Fill3, Fill4) administrated by the central management server (100).

8.   A system according to any one of the preceding claims, **characterized in that** it comprises at least one auxiliary distribution channel (165, 185) adapted to transmit signals (S, σ1, σ2) to the subscriber receivers (110) outside the central management server (100).

9.   A system according to claim 8, **characterized in that** the at least one auxiliary distribution channel includes at least one distribution resource (185) in addition to the central signal distribution system (165, 170).

10.   A system according to any one of the preceding claims, **characterized in that** the signals (S, σ1, σ2) represent at least one of text information, acoustic information, image information and video information.

11.   A system according to any one of the preceding claims, **characterized in that** at least one of the subscriber receivers (110) is represented by at least one of a TV-tuner, a satellite signal decoder, a computer and a broadband mobile communication terminal.

12.   A client computer (151, 152, 153) adapted to be included in a system according to any one of the claims 1 – 11, **characterized in that** it comprises a graphical user interface (300) adapted to present a time relationship between different signals (S) to be transmitted on at least one channel (TV1, TV2) over which the client computer has a management control.

13.   A client computer (151, 152, 153) according to claim 12, **characterized in that** the graphical user interface (300) comprises a first graphical means (310) adapted to, for each of the signals (S) to be transmitted on the at least one channel

(TV1, TV2), present the signal's contents category, and a second graphical means (320) adapted to, for at least a sub-set of the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable a user to manipulate segments (s') of each signal (S) such that a particular sub-segment (s'$_{1d}$) will be presented in each subscriber receiver of the subscriber receivers (110) which has a profile category matching a contents category associated with the particular sub-segment (s'$_{1d}$).

14. A client computer (151, 152, 153) according to claim 13, **characterized in that** the graphical user interface comprises a third graphical means (330) adapted to, for at least a sub-set of the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable the user to select a suitable sub-segment (s'$_{1d}$) for each of a number of profile categories for a segment (s') of a signal (S).

15. A client computer (151, 152, 153) according to claim 14, **characterized in that** the third graphical means (330) comprises a selection means adapted to enable the user to, for each sub-segment (s'$_{1d}$) select a profile category, wherein a default profile category is based on a compiled data set formed on basis of activity-monitoring information (R) pertaining to signals (S) having been presented in the subscriber receivers (110).

16. A client computer (151, 152, 153) according to any one of the claims 14 or 15, **characterized in that** the third graphical means (330) comprises a selection means adapted to allow the user to, for each sub-segment (s'$_{1d}$) select a geographical area within which subscriber receivers will present the sub-segment (s'$_{1d}$), wherein a default geographical area is based on positional information pertaining to signals (S) having been presented in the subscriber receivers (110).

17. A client computer (151, 152, 153) according to any one of

the claims 14 - 16, **characterized in that** the third graphical means (330) comprises a selection means adapted to enable the user to, for each sub-segment (s'$_{1d}$) select a priority level denoting a relative position of the sub-segment (s'$_{1d}$) within a particular segment (s').

18. A client computer (151, 152, 153) according to any one of the claims 12 - 17, **characterized in that** it comprises a compiler adapted to produce a preliminary organization of the signals (S) on the at least one channel (TV1, TV2) before transmitting corresponding administrative instructions to the central management server (100).

19. A client computer (151, 152, 153) according to claim 18, **characterized in that** the graphical user interface comprises a fourth graphical means adapted to enable a user to manipulate the preliminary organization of the signals (S), and client computer comprises processing means adapted to, based on the user manipulations, produce administrative instructions to the central management server (100).

20. A client computer (151, 152, 153) according to any one of the claims 12 - 19, **characterized in that** the signals (S, σ1, σ2) represent at least one of text information, acoustic information, image information and video information.

21. A computer program directly loadable into the internal memory of a computer, comprising software for controlling the functions of a client computer according to any of the claims 12 - 20 when said program is run on the computer.

22. A computer readable medium, having a program recorded thereon, where the program is to make a computer control the functions of a client computer according to any of the claims 12 - 20.